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(57) Abstract: The present invention concerns a modified polypeptide containing at least an immunodominant region and the connecting loop between N- and C-helices of gp41 ectodomain of HIV-1, wherein the connecting loop includes at least a linker fragment having: - a size convenient for keeping the native conformation of the interaction between N- and C-helices, and - an hydrophily sufficient to provide a soluble and stable trimeric form to said modified polypeptide.